

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-FA-0U-125D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-0U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

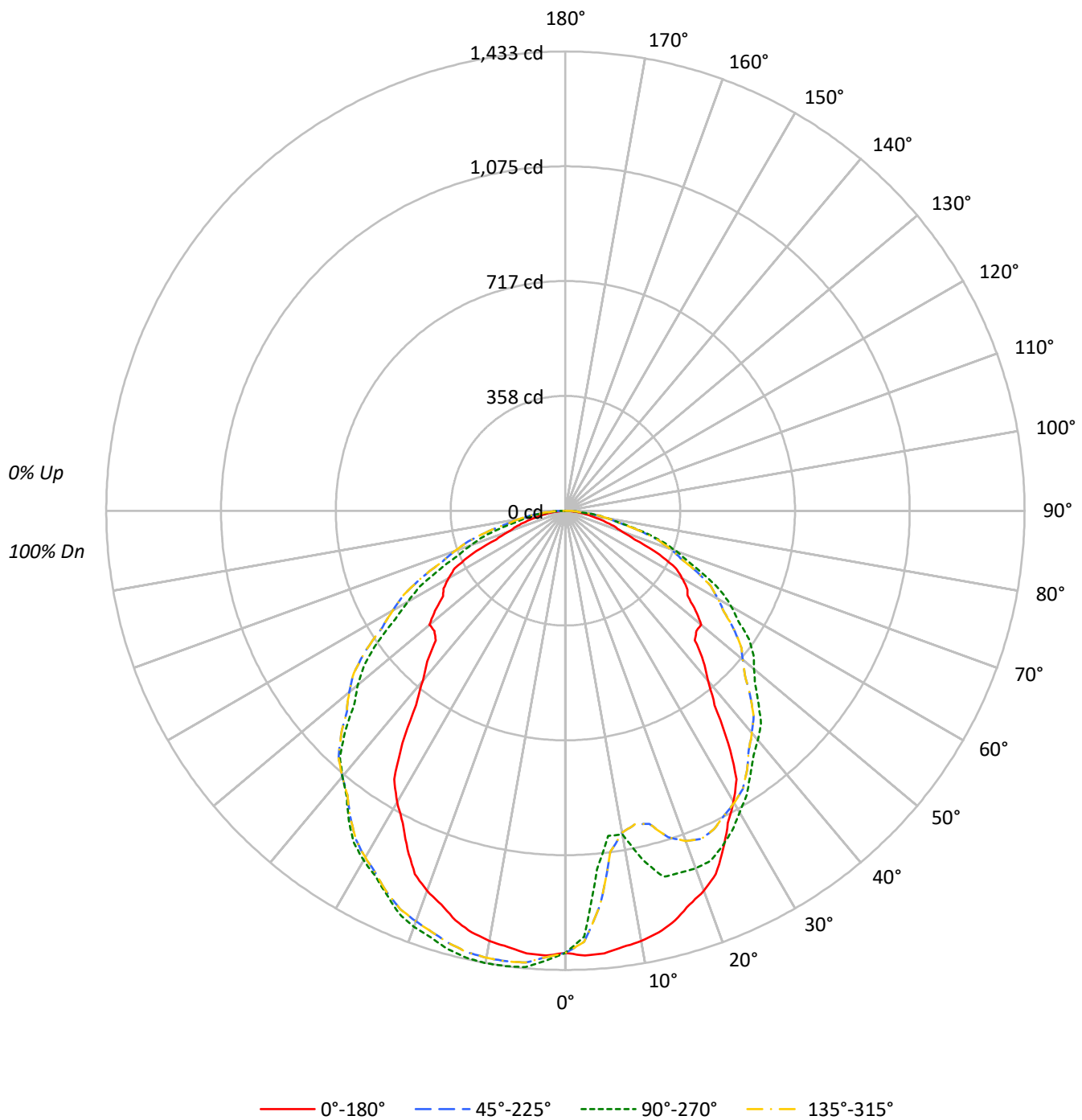
Lumens per Lamp: N/A
Luminaire Lumens: 3575.5 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12730	12730	12730	12730
5°	12839	10409	12839	13238
10°	12767	9600	12767	13428
15°	12643	11297	12643	13528
20°	12394	11663	12394	13573
25°	11867	11774	11867	13448
30°	11181	11585	11181	13420
35°	9982	11335	9982	13276
40°	8332	11256	8332	13033
45°	7459	11122	7459	12672
50°	7945	11018	7945	12142
55°	7496	11255	7496	11527
60°	7756	11033	7756	10477
65°	7067	10544	7067	9433
70°	4931	9895	4931	8416
75°	4374	8748	4374	7304
80°	3608	6796	3608	6243
85°	2212	4700	2212	5526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 12945 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	3.5
10°-20°	353.5	9.9
20°-30°	546.3	15.3
30°-40°	652.7	18.3
40°-50°	656.9	18.4
50°-60°	570.3	16.0
60°-70°	403.7	11.3
70°-80°	213.5	6.0
80°-90°	54.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1024.1	28.6
0°-40°	1676.8	46.9
0°-60°	2904.0	81.2
0°-90°	3575.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3575.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1380	1380	1380	1380	1380	
5°	1386	1124	1386	1429	1386	131
15°	1324	1183	1324	1416	1324	372
25°	1166	1157	1166	1321	1166	535
35°	886	1006	886	1179	886	547
45°	572	852	572	971	572	460
55°	466	700	466	717	466	429
65°	324	483	324	432	324	308
75°	123	245	123	205	123	129
85°	21	44	21	52	21	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8
2.5°	1389.2	1378.7	1374.5	1366.2	1350.5	1342.2	1348.4	1338.0	1342.2	1330.7	1342.2
5°	1386.3	1362.8	1343.2	1310.6	1263.6	1208.8	1195.7	1161.8	1140.9	1123.9	1140.9
7.5°	1373.2	1333.0	1273.3	1173.5	1093.4	1054.2	1044.6	1034.9	1032.3	1023.7	1032.3
10°	1362.8	1308.0	1197.0	1084.8	1028.6	1010.4	1014.3	1018.2	1026.0	1024.7	1026.0
12.5°	1348.2	1264.1	1117.7	1039.9	1002.5	1002.0	1031.0	1082.9	1119.0	1116.6	1119.0
15°	1323.6	1180.0	1043.0	993.4	981.6	1041.7	1147.4	1172.2	1181.4	1182.7	1181.4
17.5°	1288.4	1097.8	995.2	962.6	1002.5	1133.1	1165.2	1176.4	1184.2	1184.7	1184.2
20°	1262.3	1056.0	971.2	949.0	1054.7	1138.3	1157.9	1172.2	1185.3	1187.9	1185.3
22.5°	1226.8	1026.8	946.1	939.6	1084.0	1133.1	1150.5	1172.2	1183.2	1182.7	1183.2
25°	1165.7	990.8	915.1	929.4	1087.4	1105.6	1139.6	1153.9	1155.2	1156.6	1155.2
27.5°	1098.6	959.2	878.8	936.2	1066.2	1079.3	1115.8	1123.1	1128.1	1126.0	1128.1
30°	1049.5	937.3	853.7	937.3	1049.5	1057.3	1093.9	1099.1	1092.6	1087.4	1092.6
32.5°	994.2	910.1	829.7	929.9	1024.4	1035.4	1064.7	1062.6	1056.0	1051.9	1056.0
35°	886.3	864.2	785.8	905.9	981.6	996.0	1013.0	1011.7	1010.4	1006.4	1010.4
37.5°	764.9	809.8	742.5	868.6	940.4	939.3	964.7	970.1	968.8	963.9	968.8
40°	691.8	764.9	715.3	839.3	911.1	900.7	933.3	939.9	938.6	934.6	938.6
42.5°	637.5	705.4	684.0	803.8	875.6	863.1	903.1	909.6	906.2	903.3	906.2
45°	571.7	583.5	635.7	746.7	815.9	814.5	857.6	864.2	856.3	852.4	856.3
47.5°	554.5	470.5	583.0	680.4	756.6	761.5	807.8	813.5	806.5	803.1	806.5
50°	553.5	415.1	544.3	629.2	718.0	727.1	775.4	778.0	768.9	767.6	768.9
52.5°	512.7	383.8	499.4	584.3	684.5	695.8	739.9	739.4	738.6	740.4	738.6
55°	466.0	345.9	421.6	518.2	633.1	647.5	686.6	687.9	697.1	699.7	697.1
57.5°	450.6	303.1	349.6	461.1	581.4	592.6	629.4	632.6	638.8	638.6	638.8
60°	420.3	272.8	306.8	425.5	541.7	556.1	588.7	593.9	599.2	597.9	599.2
62.5°	389.0	251.9	285.9	396.3	504.1	519.5	541.7	551.1	553.2	550.9	553.2
65°	323.7	224.5	253.2	349.8	446.4	463.4	477.8	484.3	485.6	483.0	485.6
67.5°	233.9	199.2	227.7	303.9	380.1	399.2	407.5	411.5	410.1	414.8	410.1
70°	182.8	181.4	208.9	271.5	339.4	356.4	361.6	365.5	364.2	366.8	364.2
72.5°	157.7	166.8	189.0	238.1	293.4	310.4	313.5	314.3	318.2	315.6	318.2
75°	122.7	142.3	156.6	188.0	229.7	241.5	242.8	244.1	241.5	245.4	241.5
77.5°	85.6	108.3	121.1	139.2	167.3	174.7	174.4	175.2	173.1	172.8	173.1
80°	67.9	82.2	94.0	105.7	126.6	131.8	130.5	129.2	129.2	127.9	129.2
82.5°	50.1	58.2	68.9	77.5	91.1	92.2	94.0	91.6	91.6	93.5	91.6
85°	20.9	27.4	35.2	39.2	44.4	45.7	43.1	47.0	44.4	44.4	44.4
87.5°	5.2	8.4	12.5	14.6	15.7	14.6	14.6	12.5	12.5	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8
2.5°	1338.0	1348.4	1342.2	1350.5	1366.2	1374.5	1378.7	1389.2	1389.2	1395.4	1397.5
5°	1161.8	1195.7	1208.8	1263.6	1310.6	1343.2	1362.8	1386.3	1396.7	1411.1	1416.3
7.5°	1034.9	1044.6	1054.2	1093.4	1173.5	1273.3	1333.0	1373.2	1394.4	1413.2	1420.8
10°	1018.2	1014.3	1010.4	1028.6	1084.8	1197.0	1308.0	1362.8	1390.2	1411.1	1417.6
12.5°	1082.9	1031.0	1002.0	1002.5	1039.9	1117.7	1264.1	1348.2	1383.9	1403.8	1411.4
15°	1172.2	1147.4	1041.7	981.6	993.4	1043.0	1180.0	1323.6	1368.0	1386.3	1398.0
17.5°	1176.4	1165.2	1133.1	1002.5	962.6	995.2	1097.8	1288.4	1344.8	1366.5	1376.9
20°	1172.2	1157.9	1138.3	1054.7	949.0	971.2	1056.0	1262.3	1324.9	1349.7	1360.2
22.5°	1172.2	1150.5	1133.1	1084.0	939.6	946.1	1026.8	1226.8	1304.1	1329.9	1340.3
25°	1153.9	1139.6	1105.6	1087.4	929.4	915.1	990.8	1165.7	1270.1	1292.3	1308.0
27.5°	1123.1	1115.8	1079.3	1066.2	936.2	878.8	959.2	1098.6	1223.4	1255.0	1271.9
30°	1099.1	1093.9	1057.3	1049.5	937.3	853.7	937.3	1049.5	1182.7	1225.7	1247.9
32.5°	1062.6	1064.7	1035.4	1024.4	929.9	829.7	910.1	994.2	1122.1	1195.5	1221.8
35°	1011.7	1013.0	996.0	981.6	905.9	785.8	864.2	886.3	1048.2	1152.6	1174.8
37.5°	970.1	964.7	939.3	940.4	868.6	742.5	809.8	764.9	981.4	1107.5	1123.7
40°	939.9	933.3	900.7	911.1	839.3	715.3	764.9	691.8	917.7	1073.0	1086.1
42.5°	909.6	903.1	863.1	875.6	803.8	684.0	705.4	637.5	847.7	1036.5	1040.1
45°	864.2	857.6	814.5	815.9	746.7	635.7	583.5	571.7	806.7	977.7	977.7
47.5°	813.5	807.8	761.5	756.6	680.4	583.0	470.5	554.5	749.3	914.5	914.0
50°	778.0	775.4	727.1	718.0	629.2	544.3	415.1	553.5	707.5	860.2	873.3
52.5°	739.4	739.9	695.8	684.5	584.3	499.4	383.8	512.7	656.3	790.3	831.5
55°	687.9	686.6	647.5	633.1	518.2	421.6	345.9	466.0	577.0	693.1	762.3
57.5°	632.6	629.4	592.6	581.4	461.1	349.6	303.1	450.6	453.7	604.4	692.6
60°	593.9	588.7	556.1	541.7	425.5	306.8	272.8	420.3	347.2	541.7	638.3
62.5°	551.1	541.7	519.5	504.1	396.3	285.9	251.9	389.0	271.0	470.7	586.1
65°	484.3	477.8	463.4	446.4	349.8	253.2	224.5	323.7	211.5	322.4	509.1
67.5°	411.5	407.5	399.2	380.1	303.9	227.7	199.2	233.9	160.8	204.7	435.7
70°	365.5	361.6	356.4	339.4	271.5	208.9	181.4	182.8	114.9	151.4	387.7
72.5°	314.3	313.5	310.4	293.4	238.1	189.0	166.8	157.7	97.1	119.0	338.6
75°	244.1	242.8	241.5	229.7	188.0	156.6	142.3	122.7	97.9	84.8	265.0
77.5°	175.2	174.4	174.7	167.3	139.2	121.1	108.3	85.6	87.5	64.5	198.4
80°	129.2	130.5	131.8	126.6	105.7	94.0	82.2	67.9	71.8	50.9	151.4
82.5°	91.6	94.0	92.2	91.1	77.5	68.9	58.2	50.1	50.9	40.5	112.8
85°	47.0	43.1	45.7	44.4	39.2	35.2	27.4	20.9	26.1	23.5	56.1
87.5°	12.5	14.6	14.6	15.7	14.6	12.5	8.4	5.2	9.4	11.5	23.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8	1379.8
2.5°	1394.4	1394.4	1403.8	1405.9	1408.0	1404.8	1408.0	1405.9	1403.8	1394.4	1394.4
5°	1415.0	1415.0	1428.1	1432.0	1432.0	1429.4	1432.0	1432.0	1428.1	1415.0	1415.0
7.5°	1416.8	1418.9	1432.0	1434.9	1437.2	1433.3	1437.2	1434.9	1432.0	1418.9	1416.8
10°	1413.7	1418.9	1432.0	1435.9	1437.2	1433.3	1437.2	1435.9	1432.0	1418.9	1413.7
12.5°	1409.5	1413.7	1426.8	1429.6	1432.0	1429.1	1432.0	1429.6	1426.8	1413.7	1409.5
15°	1395.4	1400.7	1415.0	1417.6	1420.2	1416.3	1420.2	1417.6	1415.0	1400.7	1395.4
17.5°	1375.9	1382.4	1395.4	1399.6	1400.9	1396.0	1400.9	1399.6	1395.4	1382.4	1375.9
20°	1360.2	1366.7	1379.8	1385.0	1386.3	1382.4	1386.3	1385.0	1379.8	1366.7	1360.2
22.5°	1340.3	1351.1	1363.1	1365.1	1363.3	1359.4	1363.3	1365.1	1363.1	1351.1	1340.3
25°	1311.9	1321.0	1324.9	1324.9	1324.9	1321.0	1324.9	1324.9	1324.9	1321.0	1311.9
27.5°	1275.6	1280.3	1282.7	1284.7	1287.3	1284.7	1287.3	1284.7	1282.7	1280.3	1275.6
30°	1250.5	1247.9	1254.5	1259.7	1262.3	1259.7	1262.3	1259.7	1254.5	1247.9	1250.5
32.5°	1216.1	1217.6	1227.3	1230.4	1231.0	1228.3	1231.0	1230.4	1227.3	1217.6	1216.1
35°	1165.7	1172.2	1178.7	1181.4	1182.7	1178.7	1182.7	1181.4	1178.7	1172.2	1165.7
37.5°	1112.4	1123.9	1128.6	1125.7	1126.0	1121.8	1126.0	1125.7	1128.6	1123.9	1112.4
40°	1076.9	1087.4	1090.0	1086.1	1087.4	1082.1	1087.4	1086.1	1090.0	1087.4	1076.9
42.5°	1043.5	1051.9	1049.3	1044.3	1043.5	1041.4	1043.5	1044.3	1049.3	1051.9	1043.5
45°	988.2	992.1	980.3	976.4	973.8	971.2	973.8	976.4	980.3	992.1	988.2
47.5°	927.6	922.4	911.1	905.1	897.8	892.9	897.8	905.1	911.1	922.4	927.6
50°	889.0	873.3	864.2	849.8	844.6	845.9	844.6	849.8	864.2	873.3	889.0
52.5°	842.0	823.2	808.8	796.5	792.4	791.6	792.4	796.5	808.8	823.2	842.0
55°	774.1	745.4	721.9	715.3	714.0	716.6	714.0	715.3	721.9	745.4	774.1
57.5°	690.8	662.6	643.3	638.1	633.6	629.4	633.6	638.1	643.3	662.6	690.8
60°	634.4	608.3	590.0	584.8	573.1	567.8	573.1	584.8	590.0	608.3	634.4
62.5°	584.3	553.0	538.9	528.4	519.8	511.4	519.8	528.4	538.9	553.0	584.3
65°	511.7	475.2	460.8	451.7	436.0	432.1	436.0	451.7	460.8	475.2	511.7
67.5°	432.3	400.5	382.5	370.2	360.3	360.0	360.3	370.2	382.5	400.5	432.3
70°	381.2	352.4	335.5	321.1	313.3	312.0	313.3	321.1	335.5	352.4	381.2
72.5°	331.0	303.4	288.5	275.2	268.4	267.1	268.4	275.2	288.5	303.4	331.0
75°	259.8	233.7	221.9	212.8	207.6	204.9	207.6	212.8	221.9	233.7	259.8
77.5°	192.1	171.0	165.0	155.6	151.2	150.9	151.2	155.6	165.0	171.0	192.1
80°	151.4	134.5	125.3	120.1	118.8	117.5	118.8	120.1	125.3	134.5	151.4
82.5°	109.7	100.0	94.0	90.9	90.6	88.2	90.6	90.9	94.0	100.0	109.7
85°	58.7	56.1	54.8	53.5	52.2	52.2	52.2	53.5	54.8	56.1	58.7
87.5°	24.0	25.1	25.1	26.1	27.2	26.1	27.2	26.1	25.1	25.1	24.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1379.8	1379.8	1379.8	1379.8
2.5°	1397.5	1395.4	1389.2	1389.2
5°	1416.3	1411.1	1396.7	1386.3
7.5°	1420.8	1413.2	1394.4	1373.2
10°	1417.6	1411.1	1390.2	1362.8
12.5°	1411.4	1403.8	1383.9	1348.2
15°	1398.0	1386.3	1368.0	1323.6
17.5°	1376.9	1366.5	1344.8	1288.4
20°	1360.2	1349.7	1324.9	1262.3
22.5°	1340.3	1329.9	1304.1	1226.8
25°	1308.0	1292.3	1270.1	1165.7
27.5°	1271.9	1255.0	1223.4	1098.6
30°	1247.9	1225.7	1182.7	1049.5
32.5°	1221.8	1195.5	1122.1	994.2
35°	1174.8	1152.6	1048.2	886.3
37.5°	1123.7	1107.5	981.4	764.9
40°	1086.1	1073.0	917.7	691.8
42.5°	1040.1	1036.5	847.7	637.5
45°	977.7	977.7	806.7	571.7
47.5°	914.0	914.5	749.3	554.5
50°	873.3	860.2	707.5	553.5
52.5°	831.5	790.3	656.3	512.7
55°	762.3	693.1	577.0	466.0
57.5°	692.6	604.4	453.7	450.6
60°	638.3	541.7	347.2	420.3
62.5°	586.1	470.7	271.0	389.0
65°	509.1	322.4	211.5	323.7
67.5°	435.7	204.7	160.8	233.9
70°	387.7	151.4	114.9	182.8
72.5°	338.6	119.0	97.1	157.7
75°	265.0	84.8	97.9	122.7
77.5°	198.4	64.5	87.5	85.6
80°	151.4	50.9	71.8	67.9
82.5°	112.8	40.5	50.9	50.1
85°	56.1	23.5	26.1	20.9
87.5°	23.0	11.5	9.4	5.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)